

The observations recorded daily will be collected at the end of each month at San Juan, P. R., the headquarters of the new climatological service, and published in a form similar to the climatological section reports being published by the Weather Bureau in each of the States of the Union.

The working out of the details of the organization here outlined will require time, but there is every indication that the cordial cooperation of the foreign Governments concerned will enable the Chief of Bureau to establish, within a year or two, a climatological organization in the tropical area to the south of us which is destined to be of as great value to the agricultural interests of the world as the storm-warning system has proved to be to the shipping and commercial interests in the past 20 years.

Additional plans of the Chief of the Weather Bureau for the tropical organization at San Juan include experiments in upper air conditions in the Tropics to advance our knowledge of the general circulation of the atmosphere and the development of storms within the hurricane belt and to aid in charting aerial routes for the aviator of the future.

#### AEROLOGICAL WORK IN THE U. S. NAVY.<sup>1</sup>

By Lieut. C. N. KEYSER, U. S. N.

[Author's abstract.]

The Navy has contributed from an early time to the development of meteorology in the United States. The work of Lieut. Maury as early as 1844 is conspicuous as an example of this effort. The development of naval aviation made necessary the training of an Aerological Section, whose value during the war was such as to make its continuation necessary. Its importance as a peace-time activity has been demonstrated in connection with the trans-Atlantic flights and the recruiting trip of the *NC-4* along the coast and up the Mississippi. All of these undertakings were in conjunction with the Weather Bureau, with which the Navy maintains close cooperation. Excellent communication, such as provided by the telegraphic service of the Weather Bureau in conjunction with the radio service of the Navy, has been found of prime importance. The Meteorological Society should prove an excellent medium for cooperation between the Weather Bureau and all other agencies interested in the development of the science of meteorology.

#### REPORT OF THE CHIEF OF THE WEATHER BUREAU, 1918-19.

The Report of the Chief of the Weather Bureau for the fiscal year ending June 30, 1919, recently published, contains, in addition to the report on the usual and well-known phases of the Bureau's work, certain other interesting material. Occupying a conspicuous place in the report is a discussion of the part the Weather Bureau played in war-time meteorology in such activities as the establishment of aerial wind forecasts, and cooperation with the Army among established aerological stations; examples of the relation between the work of the Bureau and aeronautics are given in the successful trans-Atlantic flights of the *NC-4* and the British dirigible *R-34*. The "Highways Weather Service," which is a new project, is one of great interest and value, in which the principal Weather Bureau stations keep in touch with the

condition of roads and important highways; the service has proved so popular to motorists and others who have frequent use for road information that it has already proved its value. Investigations in volcanology were begun at Kilauea Volcano in Hawaii, with the expectation that they may be extended to volcanoes in Alaska and other portions of the possessions of the United States. Hampered as they were by the war, marine observations are once more being established and extended upon a program which will lead to much more extensive observations over the great ocean areas.—C. L. M.

#### REPORT OF THE BRITISH METEOROLOGICAL COMMITTEE.

[Reprinted from *Nature*, London, Jan. 1, 1920, pp. 446-447.]

A report of the Meteorological Committee for the year ended March 31, 1919, has recently been issued. This is the first report since the Armistice, and much interesting information is given in it. Immense strides have been made in meteorology, and the Meteorological Office has expanded accordingly, dependent on the necessities of the war. Whereas the sum available, including many costs for the Services, in the year 1913-14 was 29,380*l.*, in 1918-19 it was 66,371*l.* A much greater demand was made on the office for meteorological instruments, and for forecasts of all descriptions, including the upper air. The marine division, on the other hand, which is dependent for its information on the Royal Navy and mercantile marine, experienced a great falling off in the number of documents received from observers at sea, the documents numbering 2,738 in the year 1913-14 and only 43 in 1918-19. Throughout the war there was great activity in the supply of data to the Army, Navy, and Air Service, and the work commonly undertaken in times of peace was greatly augmented, although most of the information was considered private and was withheld from the general public. The restrictions upon the circulation of meteorological information were removed after the signing of the Armistice. Reports for the several branches of the office show the variety and extended work now undertaken. Any future report will presumably be made through the Air Ministry, to which the Meteorological Office is now responsible.

#### NEW FORM OF BRITISH DAILY WEATHER REPORT.

Since April 1, 1919, the Daily Weather Report of the Meteorological Office has been issued in three sections. The following is quoted from the official announcement of the change:

- I. British Section (B. report). (pp. 4.)
- II. International Section (I. report). (pp. 4.)
- III. Upper Air Supplement. (p. 2.)
- I. The British Section (B. report) is issued daily at noon, in time for circulation by midday post. It contains:
  - (a) Statistics for British stations observing four times a day at 1h., 7h., 13h., and 18h.
  - (b) Statistics for British stations observing twice a day at 7h. and 18h.
  - (c) Particulars of sunshine, etc., reported from health resorts.
  - (d) Weather map for northwest Europe for 7 h. G. M. T. on the scale 1:10,000,000, with inset maps showing the distribution over the British Isles of upper and lower cloud and visibility.
  - (e) A summary of the weather over the British Isles by districts at 7 h.
  - (f) Forecasts for the districts of the British Isles for the 24 hours commencing at 3 p. m., with a "further outlook" if conditions are sufficiently definite.
- II. The International Section (I. report) will be issued for the present on the morning of the day following that to which the report refers, in time for circulation with the day's British Section. It contains:

<sup>1</sup> Presented before American Meteorological Society, St. Louis, Mo., Dec. 30, 1919.